

III. AMENDMENTS TO THE CLAIMS

1. (CANCELED)
2. (CANCELED)
3. (CURRENTLY AMENDED) An optical pickup device comprising:
 - a first light source for emitting a first light beam having a first wavelength;
 - a second light source for emitting a second light beam having a second wavelength different from the first wavelength;
 - an objective lens for ~~focussing~~focusing said first light beam or said second light beam to the signal recording surface of an optical recording medium of a first type matching to the first wavelength or that of an optical recording medium of a second type matching to the second wavelength, whichever appropriate;
 - a photodetector for detecting the light beam ~~focussed~~focused on the signal recording surface of the optical recording medium of the first type or that of the optical recording medium of the second type, whichever appropriate, by the objective lens and reflected by the signal recording surface; and
 - a diffraction element arranged on the light path from the optical recording medium to the photodetector and carrying a pair of diffraction gratings arranged on the opposite surface planes of a single plate of a medium;
 - at least either the first light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the first type and reflected by the reflecting surface or the second light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the second type and reflected by the reflecting surface being diffracted by the diffraction element, the first reflected light beam and the second reflected light beam being ~~focussed~~focused to a same spot on the light receiving surface of the photodetector.

4. (CURRENTLY AMENDED) An optical pickup device comprising:
a first light source for emitting a first light beam having a first wavelength;
a second light source for emitting a second light beam having a second wavelength different from the first wavelength;
an objective lens for ~~focussing~~focusing said first light beam or said second light beam to the signal recording surface of an optical recording medium of a first type matching to the first wavelength or that of an optical recording medium of a second type matching to the second wavelength, whichever appropriate;
a photodetector for detecting the light beam ~~focussed~~focused on the signal recording surface of the optical recording medium of the first type or that of the optical recording medium of the second type, whichever appropriate, by the objective lens and reflected by the signal recording surface; and
a diffraction element arranged on the light path from the optical recording medium to the photodetector by way of the two pieces of optical recording medium and carrying a pair of diffraction gratings arranged on the opposite surface planes of a single plate of a medium;
each of the first light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the first type and reflected by the reflecting surface and the second light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the second type and reflected by the reflecting surface being diffracted by the diffraction element, the first reflected light beam and the second reflected light beam being ~~focussed~~focused to a same spot on the light receiving surface of the photodetector.

5. (CURRENTLY AMENDED) An optical pickup device comprising:
a first light source for emitting a first light beam having a first wavelength;
a second light source for emitting a second light beam having a second wavelength different from the first wavelength;
an objective lens for ~~focussing~~focusing said first light beam or said second light beam to the signal recording surface of an optical recording medium of a first type matching to

the first wavelength or that of an optical recording medium of a second type matching to the second wavelength, whichever appropriate;

a photodetector for detecting the light beam ~~focussed~~focused on the signal recording surface of the optical recording medium of the first type or that of the optical recording medium of the second type, whichever appropriate, by the objective lens and reflected by the signal recording surface; and

a diffraction element arranged on the light path from the light sources to the optical recording medium and carrying a pair of diffraction gratings arranged on the opposite surface planes of a single plate of a medium;

at least either the first light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the first type and reflected by the reflecting surface or the second light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the second type and reflected by the reflecting surface being diffracted by the diffraction element, the first reflected light beam and the second reflected light beam being ~~focussed~~focused to a same spot on the light receiving surface of the photodetector.

6. (CURRENTLY AMENDED) An optical pickup device comprising:
a first light source for emitting a first light beam having a first wavelength;
a second light source for emitting a second light beam having a second wavelength different from the first wavelength;

an objective lens for ~~focussing~~focusing said first light beam or said second light beam to the signal recording surface of an optical recording medium of a first type matching to the first wavelength or that of an optical recording medium of a second type matching to the second wavelength, whichever appropriate;

a photodetector for detecting the light beam ~~focussed~~focused on the signal recording surface of the optical recording medium of the first type or that of the optical recording medium of the second type, whichever appropriate, by the objective lens and reflected by the signal recording surface; and

a diffraction element having a pair of plates of a medium and arranged on the

light path from the signal recording surfaces of the two pieces of optical recording medium to the photodetector, each of said plates carrying a diffraction grating formed on one of the surface planes;

at least either the first light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the first type and reflected by the reflecting surface or the second light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the second type and reflected by the reflecting surface being diffracted by the diffraction element, the first reflected light beam and the second reflected light beam being ~~focussed~~focused to a same spot on the light receiving surface of the photodetector.

7. (CURRENTLY AMENDED) An optical pickup device comprising:
a first light source for emitting a first light beam having a first wavelength;
a second light source for emitting a second light beam having a second wavelength different from the first wavelength;

an objective lens for ~~focussing~~focusing said first light beam or said second light beam to the signal recording surface of an optical recording medium of a first type matching to the first wavelength or that of an optical recording medium of a second type matching to the second wavelength, whichever appropriate;

a photodetector for detecting the light beam ~~focussed~~focused on the signal recording surface of the optical recording medium of the first type or that of the optical recording medium of the second type, whichever appropriate, by the objective lens and reflected by the signal recording surface; and

a diffraction element having a pair of plates of a medium and arranged on the light path from the light sources to the photodetector by way of the two pieces of optical recording medium, each of said plates carrying a diffraction grating formed on one of the surface planes;

each of the first light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the first type and reflected by the reflecting surface and the second light beam adapted to be used for reading information

signals from the signal recording surface of the optical recording medium of the second type and reflected by the reflecting surface being diffracted by the diffraction element, the first reflected light beam and the second reflected light beam being ~~focussed~~focused to a same spot on the light receiving surface of the photodetector.

8. (CURRENTLY AMENDED) An optical pickup device comprising:
- a first light source for emitting a first light beam having a first wavelength;
 - a second light source for emitting a second light beam having a second wavelength different from the first wavelength;
 - an objective lens for ~~focussing~~focusing said first light beam or said second light beam to the signal recording surface of an optical recording medium of a first type matching to the first wavelength or that of an optical recording medium of a second type matching to the second wavelength, whichever appropriate;
 - a photodetector for detecting the light beam ~~focussed~~focused on the signal recording surface of the optical recording medium of the first type or that of the optical recording medium of the second type, whichever appropriate, by the objective lens and reflected by the signal recording surface; and
 - a diffraction element having a pair of plates of a medium and arranged on the light path from the light sources to the signal recording surfaces of the two pieces of optical recording medium, each of said plates carrying a diffraction grating formed on one of the surface planes;
- at least either the first light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the first type and reflected by the reflecting surface or the second light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the second type and reflected by the reflecting surface being diffracted by the diffraction element, the first reflected light beam and the second reflected light beam being ~~focussed~~focused to a same spot on the light receiving surface of the photodetector.

9. (CANCELED)

10. (CANCELED)

11. (CURRENTLY AMENDED) An optical disc device comprising:
a rotary operating mechanism for driving one or more than one optical discs
operating so many pieces of optical recording medium as to rotate; and
an optical pickup device arranged opposite to the signal recording surfaces of the
one or more than one optical discs driven to rotate by said rotary operating mechanism;
said optical pickup device comprising:
a first light source for emitting a first light beam having a first wavelength;
a second light source for emitting a second light beam having a second
wavelength different from the first wavelength;
an objective lens for ~~focussing~~focusing said first light beam or said second light
beam to the signal recording surface of an optical recording medium of a first type matching to
the first wavelength or that of an optical recording medium of a second type matching to the
second wavelength, whichever appropriate;
a photodetector for detecting the light beam ~~focussed~~focused on the signal
recording surface of the optical recording medium of the first type or that of the optical recording
medium of the second type, whichever appropriate, by the objective lens and reflected by the
signal recording surface; and
a diffraction element arranged on the light path from the optical recording
medium to the photodetector and carrying a pair of diffraction gratings arranged on the opposite
surface planes of a single plate of a medium;
at least either the first light beam adapted to be used for reading information
signals from the signal recording surface of the optical recording medium of the first type and
reflected by the reflecting surface or the second light beam adapted to be used for reading
information signals from the signal recording surface of the optical recording medium of the
second type and reflected by the reflecting surface being diffracted by the diffraction element,
the first reflected light beam and the second reflected light beam being ~~focussed~~focused to a

same spot on the light receiving surface of the photodetector.

12. (CURRENTLY AMENDED) An optical disc device comprising:
- a rotary operating mechanism for driving one or more than one optical discs operating so many pieces of optical recording medium as to rotate; and
 - an optical pickup device arranged opposite to the signal recording surfaces of the one or more than one optical discs driven to rotate by said rotary operating mechanism; said optical pickup device comprising:
 - a first light source for emitting a first light beam having a first wavelength;
 - a second light source for emitting a second light beam having a second wavelength different from the first wavelength;
 - an objective lens for ~~focussing~~focusing said first light beam or said second light beam to the signal recording surface of an optical recording medium of a first type matching to the first wavelength or that of an optical recording medium of a second type matching to the second wavelength, whichever appropriate;
 - a photodetector for detecting the light beam ~~focussed~~focused on the signal recording surface of the optical recording medium of the first type or that of the optical recording medium of the second type, whichever appropriate, by the objective lens and reflected by the signal recording surface; and
 - a diffraction element arranged on the light path from the optical recording medium to the photodetector by way of the two pieces of optical recording medium and carrying a pair of diffraction gratings arranged on the opposite surface planes of a single plate of a medium;
 - each of the first light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the first type and reflected by the reflecting surface and the second light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the second type and reflected by the reflecting surface being diffracted by the diffraction element, the first reflected light beam and the second reflected light beam being ~~focussed~~focused to a same spot on the light receiving surface of the photodetector.

13. (CURRENTLY AMENDED) An optical disc device comprising:
- a rotary operating mechanism for driving one or more than one optical discs operating so many pieces of optical recording medium as to rotate; and
 - an optical pickup device arranged opposite to the signal recording surfaces of the one or more than one optical discs driven to rotate by said rotary operating mechanism;
 - said optical pickup device comprising:
 - a first light source for emitting a first light beam having a first wavelength;
 - a second light source for emitting a second light beam having a second wavelength different from the first wavelength;
 - an objective lens for ~~focussing~~focusing said first light beam or said second light beam to the signal recording surface of an optical recording medium of a first type matching to the first wavelength or that of an optical recording medium of a second type matching to the second wavelength, whichever appropriate;
 - a photodetector for detecting the light beam ~~focussed~~focused on the signal recording surface of the optical recording medium of the first type or that of the optical recording medium of the second type, whichever appropriate, by the objective lens and reflected by the signal recording surface; and
 - a diffraction element arranged on the light path from the light sources to the optical recording medium and carrying a pair of diffraction gratings arranged on the opposite surface planes of a single plate of a medium;
 - at least either the first light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the first type and reflected by the reflecting surface or the second light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the second type and reflected by the reflecting surface being diffracted by the diffraction element, the first reflected light beam and the second reflected light beam being ~~focussed~~focused to a same spot on the light receiving surface of the photodetector.
14. (CURRENTLY AMENDED) An optical disc device comprising:
- a rotary operating mechanism for driving one or more than one optical discs

operating so many pieces of optical recording medium as to rotate; and

an optical pickup device arranged opposite to the signal recording surfaces of the one or more than one optical discs driven to rotate by said rotary operating mechanism;

said optical pickup device comprising:

a first light source for emitting a first light beam having a first wavelength;

a second light source for emitting a second light beam having a second wavelength different from the first wavelength;

an objective lens for ~~focussing~~focusing said first light beam or said second light beam to the signal recording surface of an optical recording medium of a first type matching to the first wavelength or that of an optical recording medium of a second type matching to the second wavelength, whichever appropriate;

a photodetector for detecting the light beam ~~focussed~~focused on the signal recording surface of the optical recording medium of the first type or that of the optical recording medium of the second type, whichever appropriate, by the objective lens and reflected by the signal recording surface; and

a diffraction element having a pair of plates of a medium and arranged on the light path from the signal recording surfaces of the two pieces of optical recording medium to the photodetector, each of said plates carrying a diffraction grating formed on one of the surface planes;

at least either the first light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the first type and reflected by the reflecting surface or the second light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the second type and reflected by the reflecting surface being diffracted by the diffraction element, the first reflected light beam and the second reflected light beam being ~~focussed~~focused to a same spot on the light receiving surface of the photodetector.

15. (CURRENTLY AMENDED) An optical disc device comprising:

a rotary operating mechanism for driving one or more than one optical discs operating as so many pieces of optical recording medium to rotate; and

an optical pickup device arranged opposite to the signal recording surfaces of the one or more than one optical discs driven to rotate by said rotary operating mechanism;

said optical pickup device comprising:

a first light source for emitting a first light beam having a first wavelength;

a second light source for emitting a second light beam having a second wavelength different from the first wavelength;

an objective lens for ~~focussing~~focusing said first light beam or said second light beam to the signal recording surface of an optical recording medium of a first type matching to the first wavelength or that of an optical recording medium of a second type matching to the second wavelength, whichever appropriate;

a photodetector for detecting the light beam ~~focussed~~focused on the signal recording surface of the optical recording medium of the first type or that of the optical recording medium of the second type, whichever appropriate, by the objective lens and reflected by the signal recording surface; and

a diffraction element having a pair of plates of a medium and arranged on the light path from the light sources to the photodetector by way of the two pieces of optical recording medium, each of said plates carrying a diffraction grating formed on one of the surface planes;

each of the first light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the first type and reflected by the reflecting surface and the second light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the second type and reflected by the reflecting surface being diffracted by the diffraction element, the first reflected light beam and the second reflected light beam being ~~focussed~~focused to a same spot on the light receiving surface of the photodetector.

16. (CURRENTLY AMENDED) An optical disc device comprising:
- a rotary operating mechanism for driving one or more than one optical discs operating so many pieces of optical recording medium as to rotate; and
- an optical pickup device arranged opposite to the signal recording surfaces of the

one or more than one optical discs driven to rotate by said rotary operating mechanism;

said optical pickup device comprising:

a first light source for emitting a first light beam having a first wavelength;

a second light source for emitting a second light beam having a second wavelength different from the first wavelength;

an objective lens for ~~focussing~~focusing said first light beam or said second light beam to the signal recording surface of an optical recording medium of a first type matching to the first wavelength or that of an optical recording medium of a second type matching to the second wavelength, whichever appropriate;

a photodetector for detecting the light beam ~~focussed~~focused on the signal recording surface of the optical recording medium of the first type or that of the optical recording medium of the second type, whichever appropriate, by the objective lens and reflected by the signal recording surface; and

a diffraction element having a pair of plates of a medium and arranged on the light path from the light sources to the signal recording surfaces of the two pieces of optical recording medium, each of said plates carrying a diffraction grating formed on one of the surface planes;

at least either the first light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the first type and reflected by the reflecting surface or the second light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the second type and reflected by the reflecting surface being diffracted by the diffraction element, the first reflected light beam and the second reflected light beam being ~~focussed~~focused to a same spot on the light receiving surface of the photodetector.

17. (NEW) The optical pickup device of claim 1, wherein the diffraction element generates a pair of sub-beams from the first reflected light beam and the second reflected light beam, where applicable.

18. (NEW) The optical pickup device of claim 1 wherein the diffraction element includes a diffraction grating pattern on one of the opposite side surfaces of a plate.
19. (NEW) The optical pickup device of claim 18, wherein the diffraction grating pattern is a blazed grating design.
20. (NEW) The optical pickup device of claim 2, wherein the diffraction element generates a pair of sub-beams from the first reflected light beam and the second reflected light beam, where applicable.
21. (NEW) The optical pickup device of claim 2 wherein the diffraction element includes a diffraction grating pattern on one of the opposite side surfaces of a plate.
22. (NEW) The optical pickup device of claim 21, wherein the diffraction grating pattern is a blazed grating design.
23. (NEW) The optical pickup device of claim 9, wherein the diffraction element generates a pair of sub-beams from the first reflected light beam and the second reflected light beam, where applicable.
24. (NEW) The optical pickup device of claim 9 wherein the diffraction element includes a diffraction grating pattern on one of the opposite side surfaces of a plate.
25. (NEW) The optical pickup device of claim 24, wherein the diffraction grating pattern is a blazed grating design.
26. (NEW) The optical pickup device of claim 10, wherein the diffraction element generates a pair of sub-beams from the first reflected light beam and the second reflected light beam, where applicable.
27. (NEW) The optical pickup device of claim 10, wherein the diffraction element includes a diffraction grating pattern on one of the opposite side surfaces of a plate.

28. (NEW) The optical pickup device of claim 27, wherein the diffraction grating pattern is a blazed grating design.

29. (NEW) An optical pickup device comprising:

- a first light source for emitting a first light beam having a first wavelength;
- a second light source for emitting a second light beam having a second wavelength different from the first wavelength;
- an objective lens for focusing said first light beam or said second light beam to the signal recording surface of an optical recording medium of a first type matching to the first wavelength or that of an optical recording medium of a second type matching to the second wavelength, whichever appropriate;
- a photodetector for detecting the light beam focused on the signal recording surface of the optical recording medium of the first type or that of the optical recording medium of the second type, whichever appropriate, by the objective lens and reflected by the signal recording surface; and
- a diffraction element arranged on the light path from the light sources to the photodetector by way of the two pieces of optical recording medium, wherein the diffraction element is a single plate having opposite side surfaces and a diffraction grating formed on at least one of the opposite side surfaces;
- at least either the first light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the first type and reflected by the reflecting surface or the second light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the second type and reflected by the reflecting surface being diffracted by the diffraction element, the first reflected light beam and the second reflected light beam being focused to a same spot on the light receiving surface of the photodetector.